

# **Sugar Pine Dam Radial Gates Installation American River Ranger District, Tahoe National Forest**

## ***Recreation Facility Mitigation Plan Design Narrative***

Forest Hill Public Utility District (Foresthill) has proposed to install radial gates to existing mounting fixtures within the Sugar Pine dam's spillway. This proposal would raise the reservoir high water level 20' and inundate or otherwise affect portions of existing recreation facilities including Giant Gap Campground, Shirttail Campground, Manzanita Day Use Area, the Josh Hardt accessible recreation trail, Sugar Pine multi-use trail and the Sugar Pine boat ramp. The following narrative describes the relocation, mitigation, and improvement of those affected recreation sites as shown on the attached sheets 1-4.

On all sheets, blue lines represent the new reservoir high water level elevation of 3638 ft., red lines represent recreation facilities that would be affected by the proposed action and would need to be removed and relocated, and black marked lines represent proposed new locations of the affected facilities and any connected improvements.

### **All Sheets:**

Recreation facilities affected (these facilities appear on sheets 1 – 4 but extend beyond what is shown on these sheets; these facilities would also be affected in areas not shown on sheets 1 – 4):

- Nearly the entire length (approx. 2.8 miles) of the Josh Hardt accessible recreation trail (JHT).
- Nearly the entire length (1.5 miles) of non-accessible Sugar Pine multi-use trail.
- A portion of the potable water supply line (Approximately 1.0 miles from Elliot Ranch Road to the end of Giant Gap Campground).

Facility mitigation and relocation:

- Obliterate the existing JHT and build a new JHT above the new high water line complying with Forest Service Trail Accessibility Guidelines (FSTAG). Decommission existing JHT alignment by ripping and/or grinding the asphalt surface; remove and regrade portions of the obliterated JHT that fall within 300' of developed recreation facilities. Relocate JHT terminus from the end of the lower loop road at Giant Gap campground to the entrance to Giant Gap Campground.
- Relocate existing interpretive displays (10) and existing benches (12) to similar locations along the new trail alignment; two of the interpretive displays are site specific and will have to be redesigned for new locations. Potentially add an interpretive display at the dam parking area that explains the function and operation of Sugar Pine Reservoir.
- Relocate or rebuild the North Shirttail Creek trail bridge. Reinforce the existing bridge abutments on the Forbes Creek trail bridge to protect from partial inundation
- Remove hazard trees within 150 feet up slope of the new trail alignment.

- Remove old water supply infrastructure and build a new water supply system above the new high water line.
- All recreation site relocation, mitigation, and improvements must comply with Forest Service Outdoor Recreation Accessibility guidelines.

### **Sheet 1A (Giant Gap Campground):**

#### Recreation facilities affected:

- The lower campground loop road starting at the restroom on the lower loop road and including the turn-around loop (approx. 700ft. of roadway).
- Parking spurs at sites 19 – 23, and the pull-through parking spur at site 18.
- Campsites 18 – 23 including the host site at site 20 and all associated host site improvements.
- Portions of the JHT within the entire campground.
- Double vault toilet building on the lower loop road.
- Site 13 parking spur and living area due to connection of lower loop road to upper loop road.

#### Proposed facility mitigation and relocation:

- Completely remove and regrade the lower campground loop roadway, parking areas at campsites 18 – 23, and campsite living areas at campsites 20 - 23 to meet surrounding natural grades. Connect the lower loop road to the upper loop road with a new 300 ft. section of road from the area of the existing toilet building on the lower loop road to the existing site 13 parking spur on the upper loop road.
- Completely remove the double vault toilet and replace with two single vault toilets; one along the new section of roadway connecting the lower and upper loop roads ensuring that it is a minimum of 100' from the new high water line and one in the middle of the upper turn-around loop. Relocate dumpster to new location in the middle of the upper loop.
- Site 18: The living area would remain in current location. Trails and steps between living area and parking area would be removed. Add a new double parking spur to uphill side of the living area.
- Site 19: The living area would remain in current location. Trails and steps between living area and parking area would be removed. Add a new single vehicle parking space on the new section of roadway approximately near existing site 13. Construct new trail from new parking space to campsite living area.
- Site 20: All host site improvements to be relocated to existing site 1 including all utility hookups and storage sheds. The existing double site at site 20 to be relocated to a new double pull-through site between existing sites 5 and 6.
- Site 21: Campsite and spur to be relocated between existing sites 9 & 10.
- Site 22: Campsite and spur to be relocated between existing sites 10 & 11.
- Site 23: Campsite and spur to be relocated across from existing site 17. Portions of the existing lower loop roadway may be used for the new site parking spur.
- Site 13: Campsite to be relocated to approximate location of existing campsite 20, parking spur to be relocated as a single vehicle parking space adjacent to the new single vehicle parking space for the relocated site 19. Construct new trail from new parking space to campsite living area.

- Relocate JHT terminus from the end of the lower loop road at Giant Gap campground to the entrance to Giant Gap Campground.
- Hazard tree mitigation around campground facilities associated with relocation and/or reconfiguration.

### **Sheet 1B (Giant Gap Campground):**

Recreation facilities affected:

- Portions of the JHT within the entire campground.
- Site 1 to be new host site in place of the loss of site 20.

Proposed facility mitigation and relocation:

- All host site improvements to be relocated to existing site 1 including all utility hookups and storage sheds.
- Relocate JHT terminus from the end of the lower loop road at Giant Gap Campground to the entrance to Giant Gap Campground.
- Hazard tree mitigation around campground facilities associated with relocation and/or reconfiguration.

### **Sheet 2 (Manzanita Day Use Area):**

Recreation facilities affected:

- Lower sections of the JHT within the day use area that connects to picnic sites.
- Picnic sites 1, 2, 4 – 10, 23
- Parking lot pavement due to timber harvest operations.

Proposed facility mitigation and relocation:

- Obliterate, remove and regrade sections of the old JHT and build new sections of the JHT above the new high water line. Construct trail spurs to access all new picnic sites.
- Relocate all affected picnic sites as shown in Sheet 2.
- Add shade structures to one double picnic site near the existing beach and one double picnic site on a trail spur on the north side of the Day Use Area.
- Improve access to water to facilitate swimming, paddling, and non-motorized boating use.
- Hazard tree mitigation around day use facilities associated with relocation and/or reconfiguration.
- Resurface/repair parking lot pavement as needed after timber harvest operations

### **Sheet 3 (Shirttail Campground):**

Recreation facilities affected:

- Portions of the JHT within the entire campground.
- Campsite 1 parking spur and living area.

Proposed facility mitigation and relocation:

- Obliterate, remove and regrade the existing JHT and build a new JHT above the new high water line.
- Site 1 to be relocated between sites 11 and 29 as shown in sheet 3, construct trail from new parking space to campsite living area.
- Hazard tree mitigation around facilities associated with relocation and/or reconfiguration.

#### **Sheet 4 (Sugar Pine Boat Ramp):**

Recreation facilities affected:

- The top 160' of existing boat ramp and vehicle turnaround.
- Boat ramp entrance road and 8 single vehicle boat ramp parking spaces.
- Portions of the paved portions of the JHT.
- Parking lot pavement due to timber harvest operations.

Proposed facility mitigation and relocation:

- Obliterate, remove and regrade the existing boat ramp entrance road and parking spaces and build a new boat ramp access road and 8 (2 ADA and 6 standard) single vehicle parking spaces and two parallel ADA boat parking spaces above the new high water line.
- Add approximately 150' of length to the top of the existing boat ramp. Match the grade of the new boat ramp to the grade of the existing boat ramp.
- Obliterate, remove and regrade the existing JHT and build a new JHT above the new high water line.
- Hazard tree mitigation around boat ramp facilities associated with relocation and/or reconfiguration.
- Resurface/repair parking lot pavement as needed after timber harvest operations